

## 316-654 Advanced Econometric Techniques

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: Seminars or lectures and tutorials totalling three hours per week (Semester 1). Total Time Commitment: Not available
<b>Prerequisites:</b>	316-470 Econometric Techniques or equivalent.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: <a href="http://services.unimelb.edu.au/disability">http://services.unimelb.edu.au/disability</a></p>
<b>Coordinator:</b>	Prof Harry J. Paarsch
<b>Subject Overview:</b>	This course is designed to introduce you to the main tools used in empirical economics. Special emphasis will be given to three topics: models of probability, methods of estimation, and methods of inference. Simple mathematical analysis, in particular both differential and integral calculus as well as linear algebra, will be used extensively throughout the course. In an effort to bridge the gap between analytic, closed-form methods and numerical methods, you will also be introduced to a high-level matrix and programming language, Matlab, to provide you with a basis to solve problems which have no closed-form solutions. Applications will be emphasized.
<b>Objectives:</b>	On successful completion of this subject students should be able to: <ul style="list-style-type: none"> <li># Critically evaluate current econometric research published in the top ranking international economic and econometric journals;</li> <li># Reproduce existing econometric research;</li> <li># Identify the key arguments and strategies underlying current and existing econometric research.</li> </ul>
<b>Assessment:</b>	One 2-hour end of semester examination (80%), class assignments comprising computer exercises and problem sets totalling not more than 2000 words during the semester (20%).
<b>Prescribed Texts:</b>	None
<b>Recommended Texts:</b>	Dennis Wackerly's, William Mendenhall's, and Richard L. Scheaffer's <i>Mathematical Statistics with Applications</i> . Seventh Edition. Boston: Duxbury Press, 2008. Russell Davidson's and James G. MacKinnon's <i>Econometric Theory and Methods</i> . New York: Oxford University Press, 2004. Duane Hanselman's and Bruce Littlefield's <i>Mastering Matlab 7</i> . Upper Saddle River, New Jersey: Pearson Prentice-Hall, 2005.

<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>On successful completion of this subject, students should have improved the following generic skills:</p> <ul style="list-style-type: none"><li># Evaluation of ideas, views and evidence;</li><li># Synthesis of ideas, views and evidence;</li><li># Critical thinking;</li><li># Application of software to write computer programs to perform a series of steps;</li><li># Statistical reasoning;</li><li># Problem solving skills;</li><li># Written and oral communication.</li></ul>
<b>Related Course(s):</b>	Master of Commerce - Economics Master of Economics